

AMENDMENTS TO THE CLAIMS

This listing of the claims replaces all prior listings and versions:

1. (previously presented): A method for selecting a dimerizing polypeptide, comprising:
providing a population of host cells wherein each host cell contains
 - (a) a chimeric gene which encodes a fusion protein, including one or more zinc-finger DNA-binding domains, an activation domain that is heterologous to the DNA-binding domain, and a test polypeptide, wherein the chimeric gene is a member of a library comprising a plurality of randomly generated sequences test polypeptides;
 - (b) a reporter gene operably linked to a transcriptional regulatory sequence which includes two or more binding sites (DBD recognition elements) for the DNA-binding domain of (a), wherein binding of a single copy of the fusion protein to the transcriptional regulatory sequence of the reporter gene does not result in a desired level of expression of the reporter gene;
wherein dimerization of two copies of the fusion protein to each other and binding of the dimerized fusion protein to the transcriptional regulatory sequence of the reporter gene results in a desired level of expression of the reporter gene; and
isolating host cells exhibiting a desired level of expression of the reporter gene thereby selecting a dimerizing polypeptide.
2. (currently amended): The method of claim 1, wherein the host cell further comprises a second reporter gene operably linked to a transcriptional regulatory sequence, the transcriptional regulatory sequence comprising at least one binding site for the DNA binding domain of the fusion protein ~~(a)~~.
3. (previously presented): The method of claim 1, further comprising isolating a polynucleotide comprising a sequence encoding the dimerizing polypeptide.
4. (previously presented): The method of claim 3, further comprising linking the sequence encoding the dimerizing polypeptide to a heterologous sequence.
5. (original): The method of claim 1, wherein the host cell is a prokaryotic host cell.
6. (original): The method claim 1, wherein the desired level of expression of the reporter gene confers a growth advantage on the host cell.

7. (original): The method of claim 1, wherein the desired level of expression of the reporter gene produces a detectable signal.

8. (canceled).

9. (currently amended): The method of claim 1 [[8]], wherein the library comprises at least 10^7 members.

10 to 20. (canceled).